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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,280	12/31/2003	Dieter Backhaus	Hubsch 111	9782

7590 12/09/2004
Caroline Nash
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Middleburg, VA 20117

EXAMINER

KOEHLER, ROBERT R

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,280

Applicant(s)

BACKHAUS, DIETER

Examiner

Robert R. Koehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 31, 2003 (Prel. Amdt.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14, 16-21, 23-29 and 31-34 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 15, 22 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

RRK.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12312003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration. Note that the residence does not include the name of the city in Germany.

Specification

1. The abstract of the disclosure is objected to because it is written as two paragraphs. The abstract should be written as one paragraph. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: The disclosure contains numerous references to various patent claim numbers. See the first paragraph on page 1, the third paragraph on page 3, the fourth paragraph on page 3, and the second paragraph on page 4. All references to the patent claim numbers should be removed from the disclosure.

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: The symbol for "degrees Centigrade" as used throughout the specification is not clear. For example, see the last line in the second paragraph on page 1. The superscript "°" should be used instead of the symbol "θ."

Appropriate correction is required.

Claim Objections

1. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

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claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 5 can be found in claim 4, and claim 5 should be dependent from claim 4.

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 6 can be found in claim 4, and claim 6 should be dependent from claim 4.

3. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 7 can be found in claim 6, and claim 7 should be dependent from claim 6.

4. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 8 can be found in claim 4, and claim 8 should be dependent from claim 4.

5. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 16 can be found in claim 4, and claim 16 should be dependent from claim 4.

6. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

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claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 21 can be found in claim 20, and claim 21 should be dependent from claim 20.

7. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 22 can be found in claim 20, and claim 22 should be dependent from claim 20.

8. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 23 can be found in claim 20, and claim 23 should be dependent from claim 20.

9. Claim 30 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 30 can be found in claim 22, and claim 30 should be dependent from claim 22.

10. Claim 31 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter of claim 31 can be found in claim 20, and claim 31 should be dependent from claim 20.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 5, 8 to 14, 16 to 21, 23 to 29, and 31 to 34 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,130,000 (Frater).

Frater discloses a low-carbon steel alloy separator sheet for use in a press lay-up between printed circuit board panels. Figures 1, 2, and 5 show various arrangements of the separator sheets in a press lay-up. Frater states that conventional low-carbon steels such as alloy 1008 or alloy 1001 (with or without a metal coating layer such as nickel, aluminum, or chromium) are suitable for use as separator sheets. The low-carbon steel sheets should have a thickness ranging from about 0.002 inches to about 0.025 inches (0.051 mm to 0.635 mm), and the steel sheets should possess sufficiently high yield strength and tensile strength as presented in Table 1 (column 8). Frater also discloses a separator sheet having a highly-polished (smooth) surface finish in order that the sheet can be positioned next to at least one copper foil layer. Frater also discloses the production of a sandwich-type arrangement of separator sheets and copper foil layers which constitutes a press lay-up; see Figures 1, 2, and 5. The separator sheets in the press lay-up structure can be heated to about 350° F during the curing step. See lines 29 to 37 in column 1 and line 57 in column 5 to line 60 in column 8.

Allowable Subject Matter

Claims 6, 7, 15, 22, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

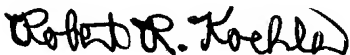
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Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).



**ROBERT R. KOEHLER
PRIMARY EXAMINER**

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December 1, 2004**
